

STRUCTURAL ENGINEERING FOR EXISTING STRUCTURES

Seismic Retrofit • Historic Preservation • National Historic Landmarks

Date: Thursday, August 3, 2017

To: Edye Graves, CBO

City of Charleston, Buildings Department

From: Craig M. Bennett, Jr., PE

cc: ---

Subject: Read Brothers – Recommendations on Public Safety

Number of sheets: 2

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recommendations.docx

Dear Ms. Graves:

Thank you for contacting us again with questions about public safety at and around the Read Brothers Buildings.

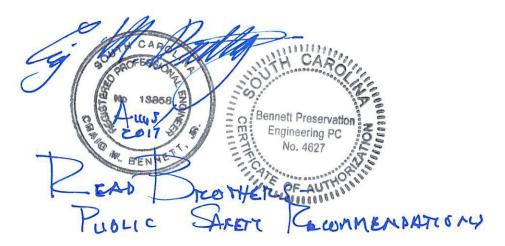
Recognizing that there is considerable vibration from both construction and traffic in the area surrounding the building, we have several recommendations to minimize the risk to the public. These recommendations can be summarized as follows:

- The sidewalk in front of the 591 / 589 1/2 King Street building must remain closed until the structural work at the parapet support beam overhead has been completed and all of the bricks have been secured so that they will not fall onto passers-by.
- The sidewalk on the north side of the 593 King Street Building, the main three story store on the corner of King and Spring Streets, must be covered to protect the public from falling debris. There is a particular problem at both the northeast and northwest corners of the building.
- The sidewalk on the northern-most 12 feet of the east side of the same building must also be covered, for the same reason.

- The northeast corner column of the 593 King Street Building, the column on the corner of King and Spring Streets, absolutely must be structurally confined to reduce the risk of sudden catastrophic failure. Both the structure and the veneer of the column have been severely damaged and the column remains a significant threat to life safety.
- On the Read Brothers property itself, there is a significant risk that bricks will fall at the southwest corner of the building. We realize that this area is not public property, but we are also aware that, at times, the public does go into this area, as there is no barrier to public entry.
- Finally, it is extremely important that the main Read Brothers Building be monitored for both structural movement (i.e. widening of cracks) and loosening of elements of the facade. There are several cracks on the building that should be monitored and a number of areas, particularly on the third floor on the west facade, where there is enough loose material that we are concerned that elements of the facade will fall with construction vibration and traffic vibration, and perhaps even with wind-induced movement of the building. Monitoring will not necessarily prevent falling of elements or even prevent a significant structural failure, but has the potential to give warning of such.

We realize that these recommendations could generate questions. We will be available to the City to answer them or help in any way that we can.

Sincerely,



Craig M. Bennett, Jr., PE Bennett Preservation Engineering PC